

Patent claims

1. Paint and coating material system comprising
  - 5 a) at least one solids component comprising at least one organic or inorganic white, black or chromatic pigment, organic or inorganic fillers, or mixtures thereof, and
  - 10 b) at least one binder component,  
characterized in that the components of the system in water, with a specific energy input of less than 150 J/cm<sup>3</sup>, based on the sum of the volumes of the components and water, produced an aqueous dispersion having a particle size of <60 µm (determined in accordance with ISO 1524: 1983).
- 15 2. Paint and coating material system according to Claim 1, characterized in that the solids component a) contains 30-99.5% by weight of pigments and/or fillers and less than 15% by weight residual moisture, based in each case on the solids component.
- 20 3. Paint and coating material system according to Claim 1, characterized in that the solid component a) is used as granules having an average particle size, determined from the mass distribution, of 20 – 5000 µm, preferably of 50 – 2000 µm, in particular of 100 – 500 µm.
- 25 4. Paint and coating material system according to Claim 1, comprising
  - from 1 to 95% by weight of solids component a)
  - from 0.1 to 60% by weight of binder component b) in solid or liquid form
- 30 and

from 4.9 to 98.9% by weight of water, based in each case on the paint and coating material system.

5. Paint and coating material system according to Claim 1, characterized in that additionally, as component c), a water-soluble or water-miscible organic solvent is used.

10 6. Paint and coating material system according to Claim 1, characterized in that the solids component a) employed is obtainable by subjecting the pigments and/or fillers in their solid form or as an aqueous suspension to optional wet comminution in an aqueous or aqueous-organic medium in the presence, if desired, of additives, and then drying them.

15 7. Paint and coating material system according to Claim 6, characterized in that the solids component a) used is obtained by spray drying, in particular by means of single-fluid or two-fluid spray dryers.

20 8. Paint and coating material system according to Claim 6, characterized in that the solids component a) used is obtained by freeze drying.

25 9. Use of the paint and coating material system according to Claim 1 for preparing aqueous paints and coating materials, especially emulsion paints and lacquer paints, metal paints and metal primers, automotive paints, wood preservative paints and stains, and also for producing aqueous coloured paper coating slips and wallpaper colours, aqueous leather dressing colours, and aqueous printing inks for paper, and for nonwovens and textiles.

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